

Chapter 2 What is a Trail?

Trails and greenways have grown in popularity and acceptance since the development of the first Indiana Trails Plan in 1996. More and more communities are developing trails because of the unique opportunities and benefits they provide. As health care and gas prices increase, more and more Hoosiers are looking to trails to provide benefits for the mind, body and wallet. Trails help build strong communities by providing outstanding opportunities for recreation and improving the health of individuals through exercise. They provide outlets for alternative transportation, protect natural resources and stimulate economic development by attracting visitors and providing a higher quality of life.

Trail, path, track, route, trek, all are words that refer to a trail, but what exactly is a 'trail'? When someone says the word trail, there are almost as many different pictures brought to mind as there are people in Indiana.

This section of Indiana's trails plan discusses the different types of trails. For the reader it is an attempt to standardize the various terms and meanings for trail related jargon so those interested in developing Indiana's statewide trails system are on the same page.

The single common denominator of a trail is that it is a linear corridor on land or in water, with access for recreation, fitness or transportation. Beyond this basic premise the image of a trail may vary from a narrow path through a forest to a paved track connecting a school to a housing

development, to a groomed path in the snow. They can be found on a single property or they can connect several properties together. Even rivers and streams serve as a trail for watercraft. They can be privately or publicly owned. In early Indiana, trails served as the major highways and trade routes that connected nomadic groups with each other and the resources they needed to survive.



Trails can be designed to accommodate a variety of uses ranging from pedestrian to motorized. They are made of many materials and can have soft or hard surfaces. The trail surface often dictates the trail use, but not always. Good design, proper construction and maintenance play a big part in the success of a particular trail or system. Soft surfaces include soil, wood chips or water, while hard surface trails are built using materials like gravel, stone, asphalt or concrete.

Since there are so many different reasons to use

trails, corridors can be designed and managed for a single use or for multiple uses. Commonly, trails are used by pedestrians including walkers, hikers, backpackers, joggers and runners. Others are used by equestrians. Still others are used by folks on motorized vehicles. Multiple-use trails can accommodate more than one use. For example walkers and in-line skaters share the trail with bicyclist; hikers and mountain bikers can use the same corridor. Properly designed and managed trails can even accommodate different types of motorized off-road vehicles, all-terrain vehicles and motorcycles.

Multiple Use Trails

Multi-use trails are designed to accommodate more than one type of use, such as hiking and biking or walking and horseback riding. These trails have had special attention paid to their design and thus can withstand different uses without requiring heavy maintenance. Multi-use trails tend to be wider than most single use trails so that they may accommodate more users. They may have lanes so that users can pass when going different directions. Sometimes, if the trail is very narrow, travel is restricted in one direction on one day and the opposite direction the next day. This helps to keep the different uses from interfering with each other as they travel along the trail.

The surfaces of multi-use trails vary widely. Many trails have a hard surface such as concrete or asphalt. These hard surface trails best support walking, jogging, in-line skating and bicycling. Many of Indiana's urban, and some rural multi-use trails, are hard surface trails. Gravel and limestone screenings are another popular surface for multi-use trails. These surfaces in Indiana utilize local materials and also support walking, jogging and bicycling. In many cases screenings are less expensive to install than pavement.

Proper trail etiquette is very important on multi use trails so that every user can have a safe and enjoyable experience. In Indiana, the Cardinal Greenway, the Monon Trail and the Pumpkin Vine trail are examples multi-use trails. Currently, no trails support both motorized use and non-motorized use at the same time, but there are trails in several state forests and state recreation areas as well as many local sites that support both mountain biking and foot traffic.



TRAIL USER ETHICS

Respect the rights of all trail users to enjoy the beauty of the outdoors.

Respect public and private property.

Park your vehicle considerately, taking no more space than needed, without blocking other vehicles, and without impeding access to trails.

Keep to the right when meeting another trail user. Yield the right-of-way to traffic moving uphill.

Slow down and use caution when approaching or overtaking another trail user.

Respect designated areas, trail-use signs and established trails.

When stopping do not block the trail.

Do not disturb wildlife. Avoid areas posted for the protection of wildlife.

Pack out everything you pack in, and do not litter.

Travel speed should be determined by equipment, ability, the terrain, weather and the traffic on the trail.

In case of an emergency, volunteer assistance.


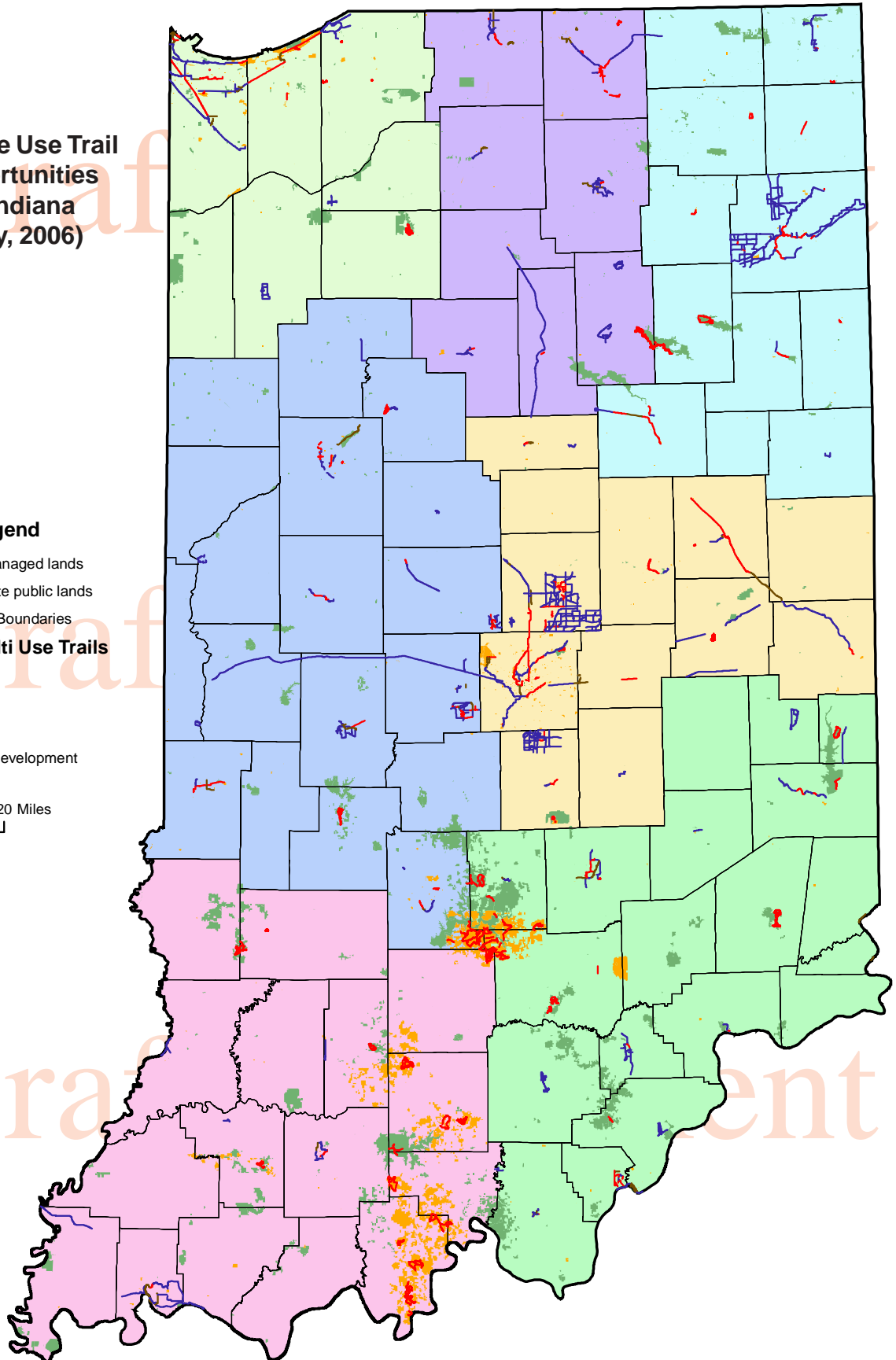
Do not interfere with or harass others. Recognize that people judge all trail users by your actions.

Motorized users should pull off the trail and stop their engines when encountering horseback riders. It is also a good idea to take off your helmet and greet the riders.

Multiple Use Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Indiana Multi Use Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles

Trails that Comply with the Americans with Disability Act (ADA)

There are often misunderstandings about what is meant when we talk about Americans with Disabilities Act (ADA) compliance and trails. One of the most common is that accessible trails have to be paved or concrete and all level surfaces. The fact is that people with mobility limitations want a trail experience that is as natural as possible. Neither the Department of Natural Resources nor people with disabilities want to compromise the natural environment. Therefore, this plan does not call for every trail to be made completely “wheelchair accessible”. Some trails can not be made accessible; but many can and should be.

What does it mean to be accessible?

The most common standards for accessibility, the Uniform Federal Accessibility Standards (UFAS) and Americans with Disabilities Act Accessibility Guidelines (ADAAG) address the built environment – bricks and mortar. These documents provide guidance on such things as how wide a door opening is to be or how high a mirror is to be located from the floor, but sometimes these guidelines don’t transfer smoothly to the natural environment. Although not enforceable standards yet, the best guidance for accessible trails comes from the *Accessibility Guidelines: Outdoor Developed Areas* presented to the US Architectural and Transportation Barriers Compliance Board by the Regulatory Negotiation Committee on Accessibility Guidelines in September 1999. Taking into consideration the preservation of the environment, the nature of the outdoor experience and access, the committee explored many approaches and compromised in many areas to reach agreement



on minimum accessibility guidelines for outdoor developed areas.

Basic accessibility

There are “conditions for departure” in the guidelines that allow for deviations from accessibility standards, but to be considered an accessible trail, these four basic components must be present:

Surface – The surface must be firm and stable. Firmness means the surface “does not give way significantly under foot.” Stability means that the surfaces “do not shift from side-to-side or when turning (as in a wheelchair)”. A rotational penetrometer is the best way to measure this, but the presence of footprints or wheel tracks is a good indicator that the surface is neither firm nor stable.

Width – The clear tread width of the trail is the width of the usable trail tread measured perpendicular to the direction of travel and on or parallel to the surface of the usable trail tread. The minimum width for a specified length of a trail to be considered accessible is 36 inches.

Protruding Objects- Nothing shall protrude into the vertical clearance of an accessible trail less than 80 inches in height and the 36 inches of trail width.

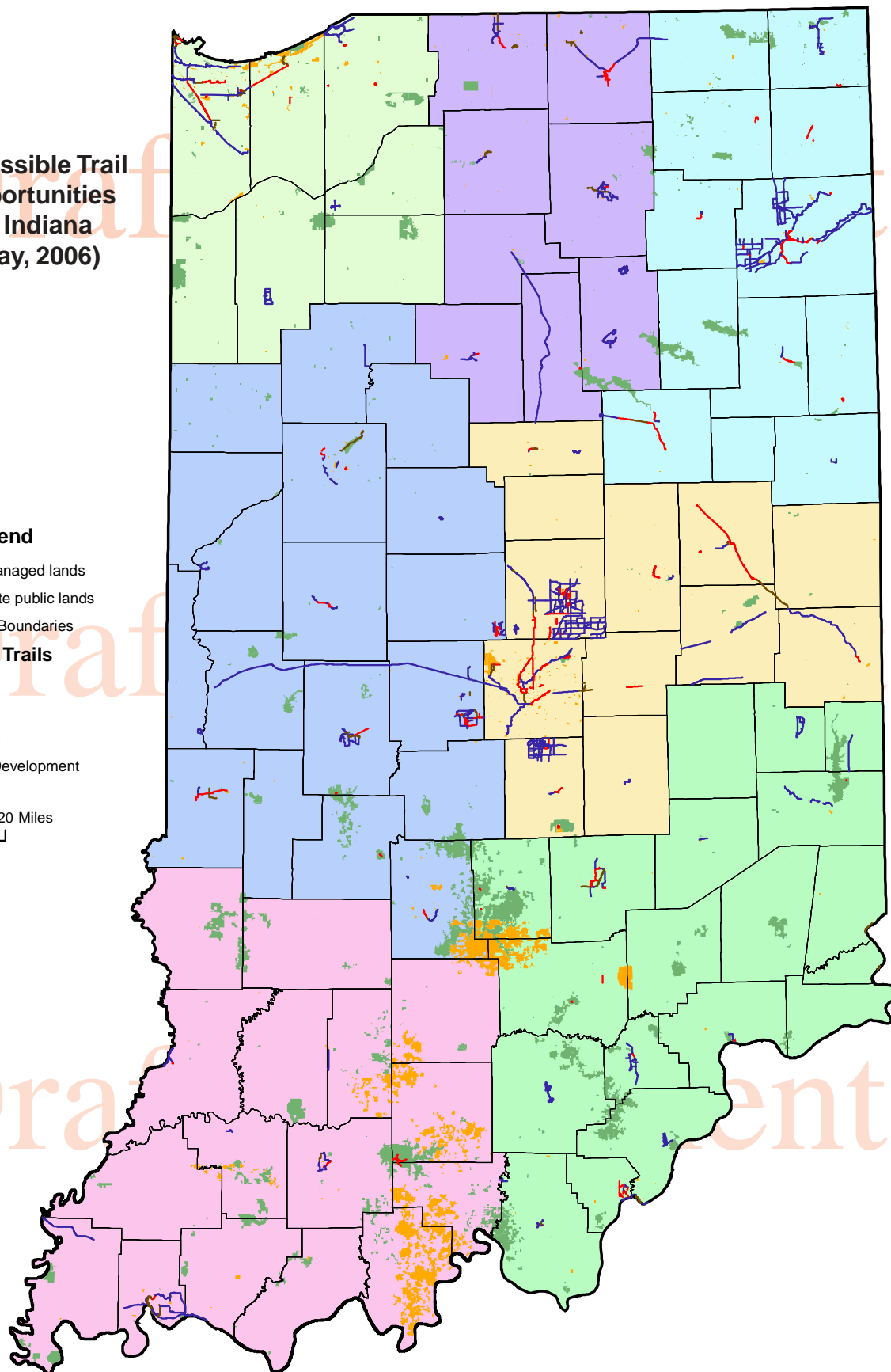
Slopes – The running slope is the grade of the surface measured in the dominate direction of travel. Preferably this grade should be no more than 1:20 (5%), but no more than 30% of a total trail length shall exceed 1 inch up for 12 inches in length (8.33%). The cross slope is the grade of the surface measured from side to side and shall not exceed 1 inch up for every 20 inches in length (5%).

There are a number of other features that must be examined to determine compliance with accessibility requirements – openings in the surface, tread obstacles, passing spaces, edge protection, resting intervals, signs, pit toilets, etc. – but they should be evaluated by an individual trained to assess these requirements. We have simply attempted here to provide some basic thoughts about accessibility. Please do not consider this a guide to compliance.

Accessible Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Accessible Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



Bikeways

Bicycling has been a popular recreation activity in Indiana. In 2003 approximately 43% of the respondents indicate they used a bicycle recreationally. Increasingly, people are riding bikes in Indiana as a reliable and economical mode of transportation. In the 1990 and 2000 censuses, the percentage of the population who used bicycle for transportation was at about 2%. As gas prices continue to rise, the level of bicycle use for transportation as well as recreation is expected to continue to increase.

Currently, local bike clubs, followed by metropolitan planning organizations are taking the lead in developing bike routes in various Indiana counties. Some regions have formalized routes that are published through local tourist and economic development entities. Many local clubs maintain excellent websites that assist the user in choosing their own routes. In some areas of Indiana there is a coordinated approach to the development of on-road and off-road bicycle routes, but this is by no means the norm. A statewide effort would significantly impact the availability of bicycle opportunities.

Bicycle facility planning in Indiana is in it's infancy and consequently still evolving. The Indiana Department of Transportation, has indicated that the development of an Indiana Bikeway plan is necessary. This plan should provide planners and managers with a solid framework for meeting a wide variety of bicycling needs. Since bikeways encompass both on-road and off-road routes, a comprehensive study of existing on road routes in necessary. The current trails inventory only covers those bike routes that are incorporated as off road trails. On-road routes are generally not included because of the staff time involved in tracking them.

As with any trail planning, the most important aspect of bicycle planning involves obtaining input from the bicycling public. Many areas in Indiana have organized bicycling clubs that help gather and provide information. However, not all community bicycling needs are represented by clubs. Therefore, governmental agencies and the public should be involved throughout the process.

Bicycle plans should be compatible with 1) local comprehensive plans; 2) transportation plans developed at the local, regional (Metropolitan Planning Organization - MPO), or state levels; 3) transit plans; and 4) parks and recreation plans. Where appropriate, plans should follow American Association of State Highway and Transportation Officials (AASHTO) design guidelines.

Following the planning, design criteria should be established. Then performance criteria should be established, possibly including: accessibility, directness, continuity, route attractiveness, low conflict, cost, ease of implementation, and multi-modal coordination. An analysis should be made — compiling an inventory of significant origins and destinations, projected and current bicycle use, existing bicycle facilities, planned highways improvements, and local comprehensive plans. Next, desired routes should be developed and evaluated and types of facilities designated. This should be followed by bicycle education, safety, law enforcement and encouragement programs. After development and adoption, the final step is implementation.

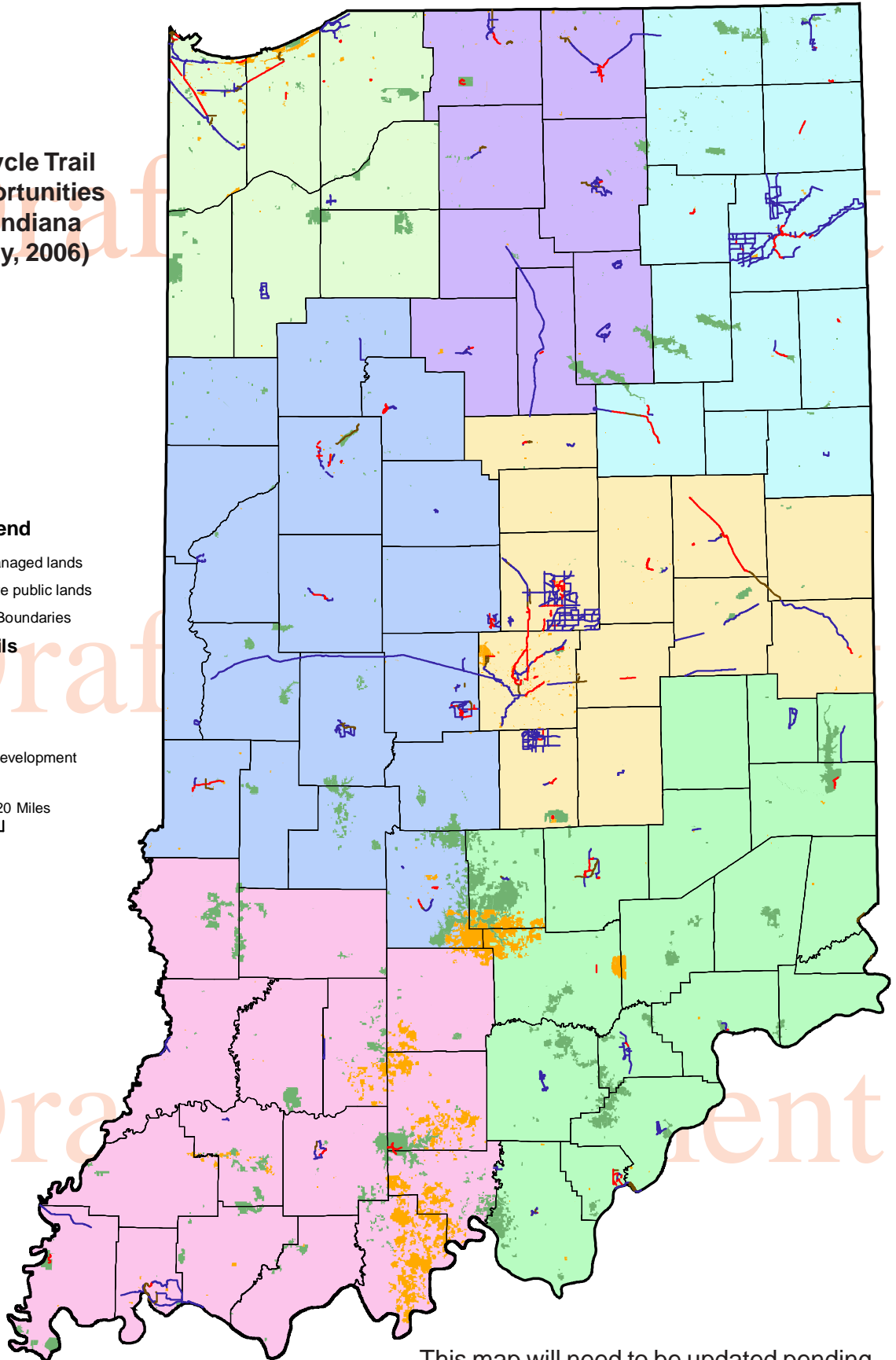
Counties With Bicycle Routes



Bicycle Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Bicycle Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



This map will need to be updated pending location of mapped bikeways data.

Mountain Bike Trails

Mountain biking has grown from an obscure sport created in the late 1970's in the western United States to one of the largest and fastest growing outdoor sports in the world. It is enjoyed by people of all ages, nationalities and income levels. Because of the varied nature of the sport and the disciplines that it includes, mountain biking can be done anywhere from a back yard to a gravel road. However, the majority of mountain bikers prefer to ride trails they call singletrack. These are narrow trails that run through forests or fields.

Considering that nearly 40% of adults in the U.S. report they ride bicycles, mountain biking is a sport that is enjoyed by millions of Americans. Mountain biking is also a sport that can be enjoyed throughout a person's lifetime. Mountain bikes help to fuel the bicycle industry in the U.S. which is a \$5.5 billion industry that employs close to 100,000 people. The inherent comfort and flexibility of the modern mountain bike has led to an estimated 80% market share of bicycle sales in countries like the United States, United Kingdom, Canada, Australia and New Zealand. In Indiana, mountain bikes can be ridden year-round with proper equipment and clothing.

Advocacy organizations employ a variety of means including education, trail work days and trail patrols. Examples of trail work days can include: flagging, removing downed trees after a storm, cutting and/or signing a new trail. They also provide programs to educate local bicycle riders, property managers and other user groups on the proper development of trails. The International Mountain Bicycling Association (IMBA) rules of the Trail is an example of such courses. In Indiana, the statewide organization that represents mountain bikers is the Hoosier Mountain Bike Association (HMBA). The HMBA is an affiliate club of the IMBA. The HMBA also works with smaller local and regional clubs in Indiana to further the cause for mountain bikers. The Indiana Bicycle Coalition also represents mountain bikers and has done substantial work to further the cause of mountain biking in Indiana.

Dozens of miles of multi-use trails have been built in Indiana, utilizing IMBA's well-respected and widely used Trail Solutions manual to build

sustainable trails. By default, every mile of trail that HMBA builds in Indiana is multi-use. In addition to being used by mountain bikers, all of HMBA's trails are open to walkers, hikers, backpackers and trail runners. Properly designed mountain bike trails are appropriate and enjoyable for many types of users to enjoy. This makes mountain bike trails a useful and attractive outdoor amenity. Properly built mountain bike trails have little environmental impact. Studies reported in the IMBA Trail Solutions manual show that mountain biking's impact is comparable to or even less than other forms of trail use. In contrast to other types of trails, mountain bike trails can be built quickly. This makes more trails available to Indiana's citizens. For example, the federal RTP program has funded 100 miles of trail projects in Indiana since 1995. While most funded projects create just a few miles of trails, the Brown County RTP project will create almost 15 miles of new trails including amenities.

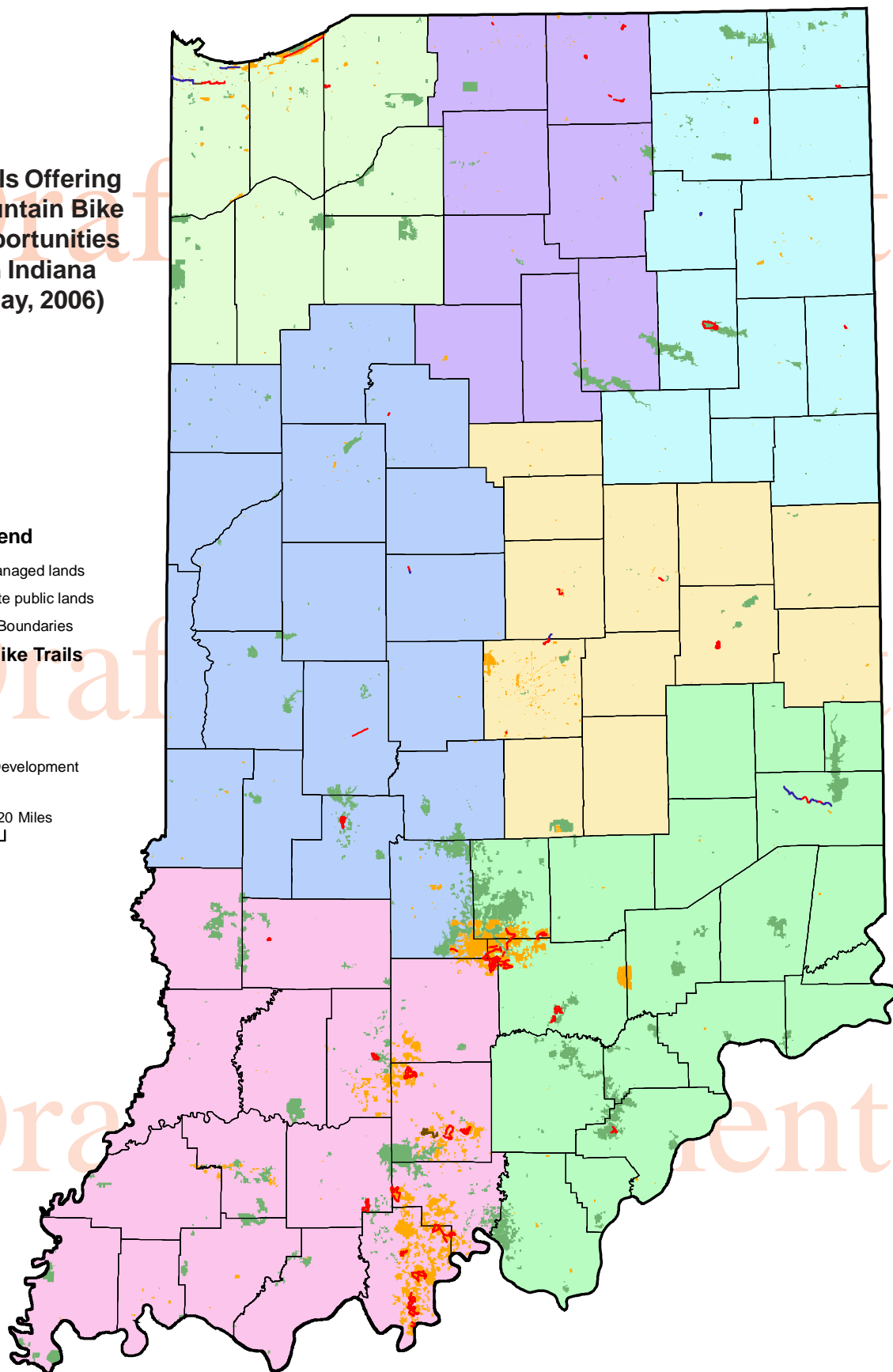
Connectivity of trail amenities leads to increased use and more tourism. For example, at Rangeline Nature Preserve in Anderson the new mountain bike trails connect to downtown via a path along the river. The new trail system being built at Brown County State Park will ultimately connect to the Salt Creek Trail running from Nashville to the state park entrance. When building trails, the HMBA always tries to make links to cultural and historic sites as well. Here is an example of one of the larger and higher-profile projects that the HMBA is currently participating in.

Brown County is Indiana's largest state park and is quickly becoming a prime mountain biking destination in the Midwest. The HMBA has been hard at work building some of the best single track trails around. With two fully completed loops, as well as an out and back trail to Hesitation Point, Brown County has approximately 12 miles of trail, with much more to come. 2006 holds a lot of promise for Brown County. A Recreational Trails Program Grant will fund 10-15 additional miles to be professionally designed and finished by volunteers. This is an exciting time for mountain bikers in Indiana, as Brown County is sure to become a well known bicycle destination, with some of the best designed trails in the mid-west.

Trails Offering Mountain Bike Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Mountain Bike Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



Indiana Rail-Trails

Based on information collected by the Rails-To-Trails Conservancy, there were 12,585 miles of rail-trails in the U.S. in 2004. As of July 2004 there were 146 miles of rail-trail open in Indiana, according to the Hoosier Rails to Trails Council. (Their website, <http://www.indianatrails.org/>, provides a current and comprehensive look at rail-to-trail projects all over the state.)

Several rail-trails are under development around Indiana. The Cardinal Greenway, part of the 6,000-mile American Discovery Trail, will extend about 75 miles and connect Richmond, Muncie and Marion. The first 10-mile segment opened in Muncie in 1998. By 2002 over 30 miles of the Cardinal were open for use in Marion, Grant County, Delaware County, Muncie and Richmond. The B&O Trail, another rail-trail of statewide importance, will be 63 miles long and permit non-motorized travel from Speedway in Marion County, through Hendricks and Putnam Counties, to the Wabash River in Parke County.

Travel the 11.5-mile Erie Lackawana Trail in Lake County to the 7.5-mile Oak Savannah Trail. Then take the 10.2-mile Prairie Duneland Trail and bridge the gap to the reopened Calumet Trail in Porter County. Through these few miles of trails, one gets the feeling of commitment to trails that exists in northwest corner of Indiana. Northwest Indiana leads the state in rail-to-trail projects. Additional links under development along abandoned



railways and utility rights-of-way in Porter and Lake Counties are creating a regional trail network. Supplementing various multi-use paths in LaPorte and Porter Counties, a network of designated bike routes creates an even more comprehensive system for bicycle travel.

In 1996, the first phase of the Monon Trail opened in Indianapolis with reports of very heavy use. In 2004, the last phase of the Monon was completed. In 2001, the City of Carmel completed a five-mile extension of the Monon. With 15 miles open for use, this immensely popular trail will now be extended into Westfield and beyond. About half the funds awarded through the Federal Transportation Enhancement Program administered by the Indiana Department of Transportation support rail-trail and other bicycle and pedestrian projects in Indiana.

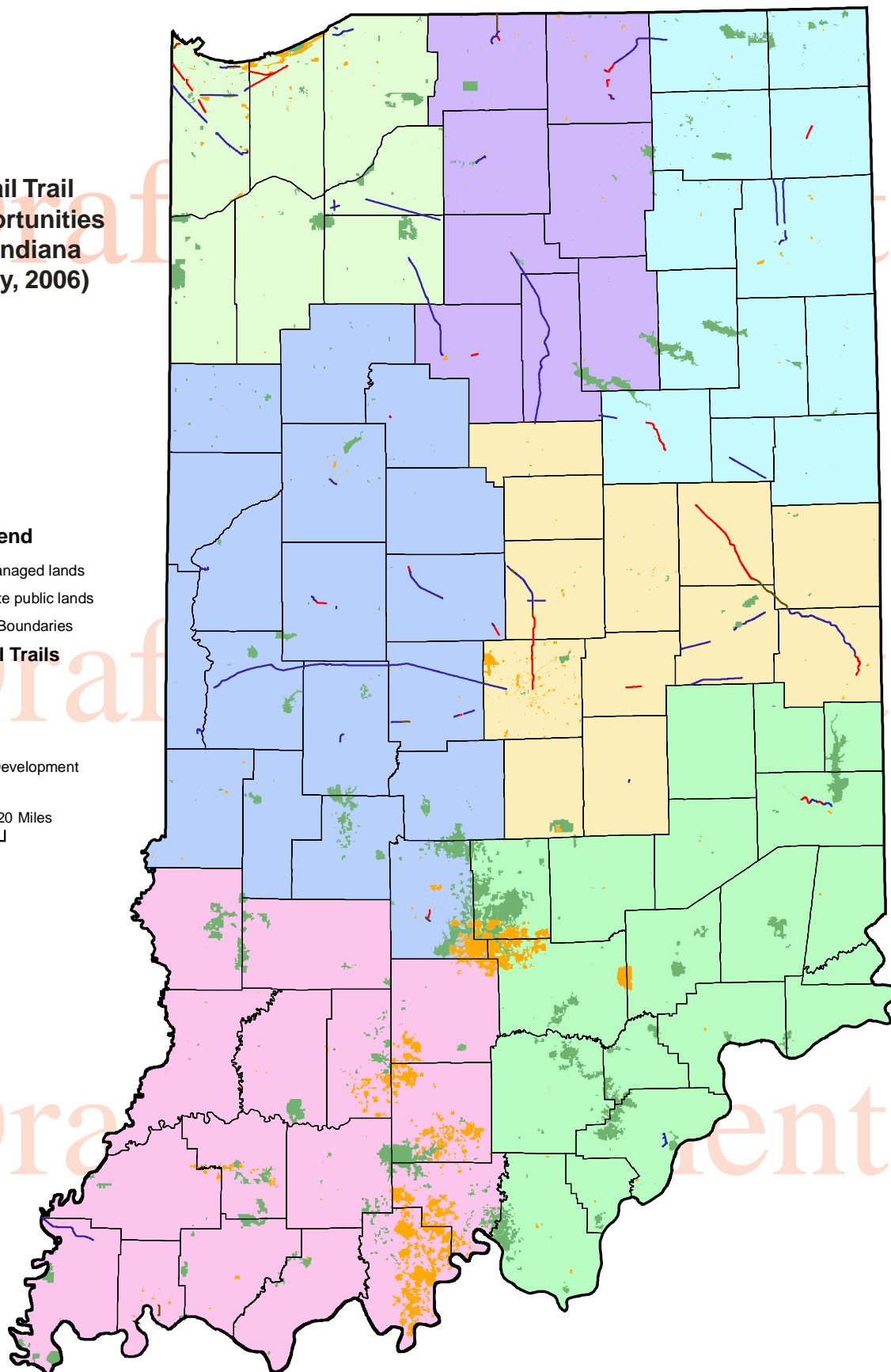



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Rail Trail Opportunities in Indiana (May, 2006)

- Legend**
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- Indiana Rail Trails**
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0 5 10 20 Miles



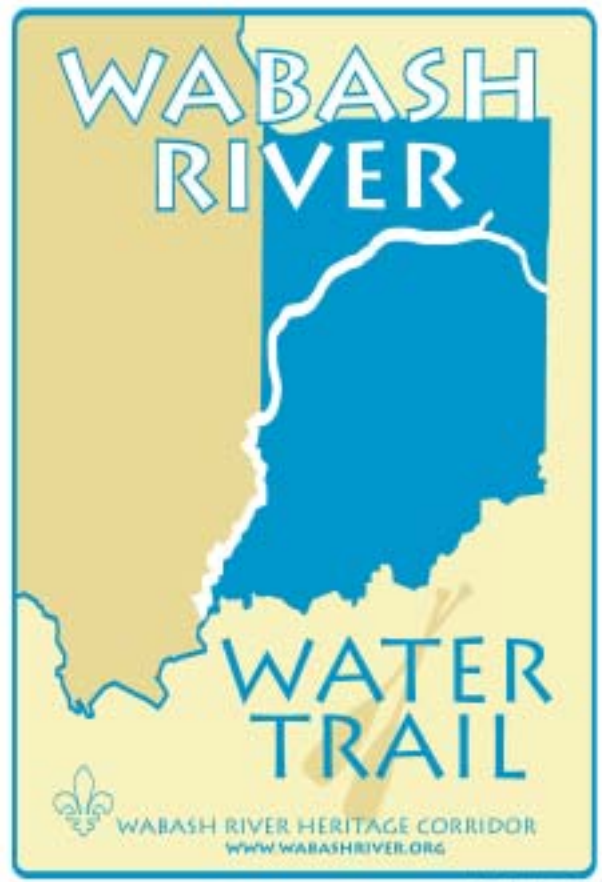
Water Trails

Trails are often thought of as land based features, however rivers, streams and lakes offer another type of trail. Water trails are sometimes referred to as blueways. The simplest water trail consists of a place to launch a vessel, a place to take it out and the water as a path connecting the two.

Water trails played an important part in American history. Rivers, canals and lakes have been used as a means of transportation and trade for centuries. Before there were roads, there were waterways. Waterways were such an important part of commerce that many of Indiana's cities and towns began and grew on ports or along rivers. Although the Ohio River and the Great Lakes continue to serve as major commercial routes, purpose for travel on Indiana waterways has shifted more from transporting goods to recreational use including boating and fishing.

Recreational boating, including canoeing and kayaking, is helping to create a new kind of commerce on Indiana waterways. There are more than 35 Indiana businesses and public facilities that rent kayaks or canoes. Many provide a shuttle service taking paddlers and gear to a launch site, provide pick-up at the destination and transportation back to parking and personal vehicles. Websites and travel literature are good sources for information about canoeing and kayaking opportunities and liveries that offer services.

The Indiana Department of Natural Resources (DNR) specifically defines a water trail as having two designated public access sites within



reasonable distance (about 15 miles or less). Use of public access sites assures there will be safe access to the water and formal parking facilities. While it may be legal to launch a boat using public right of way at a bridge crossing, these locations are not recommended for the general public. A number of private sector sources continue to identify bridge crossing right of ways for access, but DNR is moving toward recommending official public access sites only.



A comprehensive modern water trail would have official public access sites, but would also include maps, signage, camping/lodging, restrooms and convenient places to secure necessary supplies. The Wabash River Heritage Corridor Commission (WRHCC) is working to map the entire Wabash River in Indiana as a comprehensive modern water trail. The Wabash River is a navigable stream for 441 miles, almost the entire length through Indiana. New maps will make the public aware of significant sites on this cross-state water trail that links not only the northeast portion of the state to the southwest, but also links travelers to Hoosier

heritage along this historic river corridor. From a boat, the river will be a living, moving museum of Indiana history and natural heritage.

Disputes sometimes occur about ownership of stream banks and stream beds. Most of the land along the rivers in Indiana is privately owned and should not be used without permission. This is why having a public access site is so important. If a river has been determined navigable, then the water and riverbed are held in public trust by the State and the water and riverbed are useable by the public for recreation. According to the Indiana Natural Resources Commission (NRC), *Navigable waters are those that were “susceptible” to boating “according to the general rules of river transportation at the time Indiana was admitted to the Union [1816].”*

The NRC reviewed historical documents and established a list of the Indiana navigable streams. Just because a waterway is not listed it does not mean it is not navigable. It just means no historical information has been presented that would support declaring it navigable. Disputes involving the

Indiana navigable waterways listing would have to involve a court decision or a ruling by the NRC. A list of navigable rivers is available from the Natural Resources Commission and can be seen on their webpage along with more information. <http://www.in.gov/nrc/policy/navigati.html>

With thousands of miles of river and hundreds of lakes, Indiana is a great state for boating including paddling a canoe or a kayak. Wherever you are on the water, all watercraft users must have a wearable personal floatation device (PFD), even on a lazy Indiana river. Indiana does not require registration on watercraft without a motor. The rivers and streams of Indiana are not listed above Class II, meaning rapids and whitewater are not typical along streams except in the event of high water after rain events. Indiana waterways and water trails provide an opportunity to enjoy Hoosier outdoors at its best. The experience can be vigorous exercise or a leisurely float. Boaters can go fishing and watch the wildlife as they float along the way, participate in stream clean up activities or just enjoy the scenery.



Equestrian Trails

Recreational equestrian use in Indiana has doubled in the past ten years with a steady decrease in available opportunities due to the increase in urban sprawl and designated trail systems. The average age of riders has also risen with many retirees taking up the activity to gain access to the great outdoors. Recreational trail riding in Indiana takes place daily and year round.

In the most comprehensive research document ever compiled on the American horse industry titled “***The Economic Impact of the Horse Industry in the United States***”, conducted by Deloitte Consulting, LLC, states that 105,700 horses are used in Indiana for recreational horseback riding with an economic impact valued at \$1.3 billion total. This study reveals the importance of the recreational sector of the horse industry.

Horses have a special place in the history and culture of the United States and Indiana in particular. Even today, throughout Indiana, horses are also used as the primary form of transportation by the Amish and an alternative for those who prefer carriages to riding horseback. Equestrians are credited with developing many of the nation’s earliest trails and they continue their trailblazing legacy. Many Hoosiers ride their horse for sheer joy of the activity. Some support their family working for one of the growing numbers of equine businesses. Still, others are breeders and competitors at the highest levels. Together they all contribute to the economic health of Indiana through their shared passion for Horses.

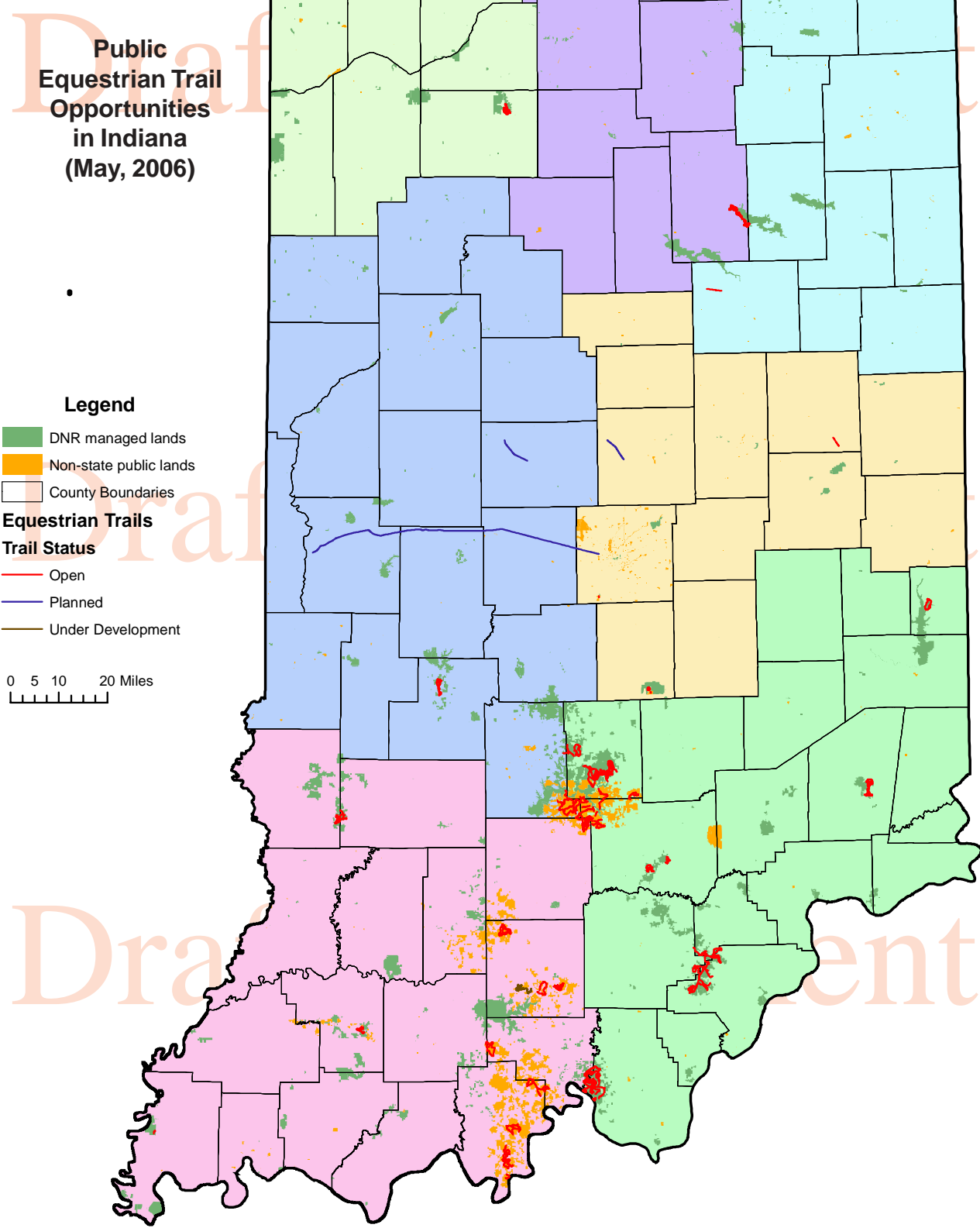
Indiana has many untapped resources available to accommodate recreational riding. Northern Indiana has a particular lack of riding opportunities from undesignated trail systems available. Equestrians’ love of the backcountry and their need for open land in suburban areas make rail-trails a perfect match for equestrian use. Horseback riders like rail-trails because they provide separated paths from motorized vehicles, which is a much safer environment for both horse and rider. Where equestrian use is high, some trails even have separated bridal paths for a more enjoyable riding experience. The key is a good working relationship with local planners, government officials, and other



trail user groups. Willingness to participate in the process of acquiring the rights-of-way, building the trail, and maintaining and policing the trail after completion will do much to meet current and future demands.

Because there are many types of trail rides, a variety of options should be made available. The basic and most important requirement is for trail facilities to be close to where horses are stabled. Trails should be from two to twenty-five miles in length, which is fairly easy to meet in the more rural parts of the state, but becomes increasingly difficult as the more urban areas are approached. Urban sprawl has replaced farm land and open space with housing and commercial areas, thereby forcing the equestrian ever further from the city center. Public development of greenways, such as stream valley corridors, abandoned roads and railroads, utility corridors, etc., will have to become standard procedure if the future trail needs of equestrians and other trail users are to be met.

Managing horse trails and facilities on public lands can create challenges for land managers. Conflicts can arise between user groups. For instance, many trails suitable for hikers are not suitable for horses. Parallel trails are often practical in a wider corridor and should be considered. In the past, off-road vehicles (ORVs) and horses were not considered compatible. Reducing ORV noise levels, proper trail planning, and good trail etiquette can mitigate the vast majority of these past concerns. Using ORVs to support organized horse events has proven mutually beneficial, allowing both user groups to learn more about dual use possibilities.



Motorized Trail Use

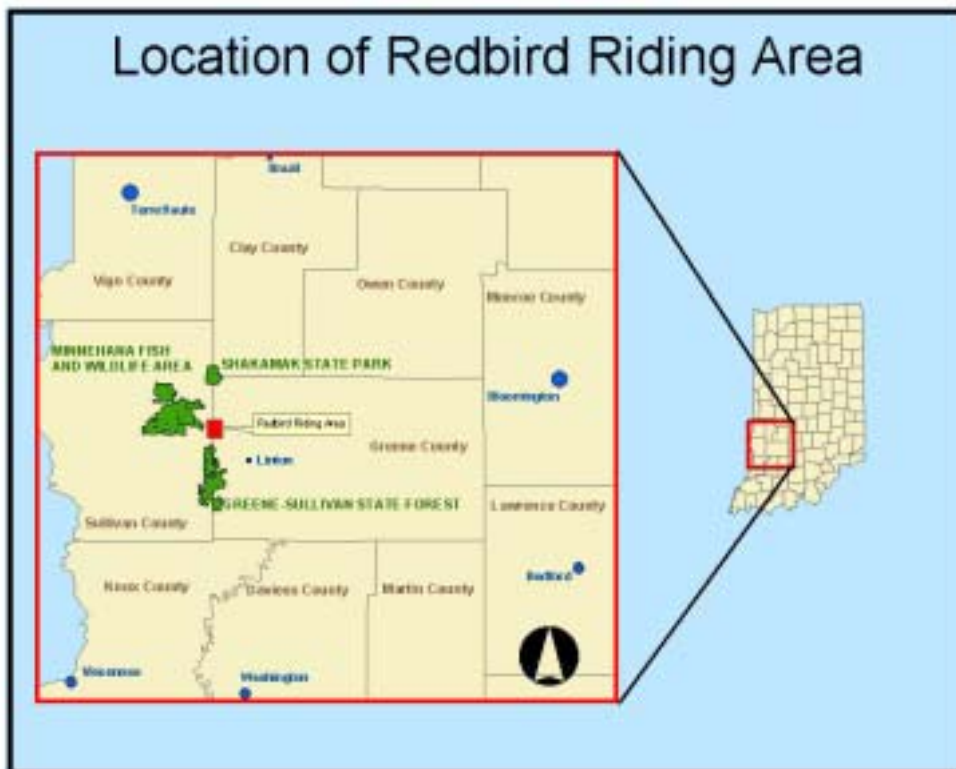
Motorized off-road vehicle use in Indiana has seen a significant increase over the past ten years. All terrain vehicle (ATV) riding increased from 5.6% of the population to 8.3%. Four wheeled drive off-road use increased from 8.8% to 11.4%. Off-road motorcycle riding remained steady at between 5% and 6% of the population. The increase in motorized vehicle recreation is reflected in the number of Indiana registered off-road vehicles. Between 1995 and 2005, the number of registered off-road vehicles increased from 9,175 vehicles to 32,176 vehicles.

With the increased use of off-road vehicles (ORVs), alternately known as off-highway vehicles (OHVs), has come increased demand for places to ride. In response to this demand, Indiana DNR, in cooperation with Indiana off-road vehicle clubs, opened the Redbird State Riding Area in 2003. Redbird SRA is located on former coal mine land in Greene and Sullivan counties near Dugger, Indiana. Although Redbird is open for riding, it is still under development. Redbird Riding Area is expected to provide approximately 70 miles of off-road vehicle trails on over 1,000 acres of land when fully developed.



Indiana DNR is also planning to provide off-road vehicle riding at a property known as Interlake in Pike and Warrick counties near Lynnvill, Indiana. Interlake, like Redbird, is situated on former coal mining land. At over 3,000 acres, Interlake is expected to provide trail opportunities for several user groups including off-road vehicle users, equestrians and mountain bikers and non trails groups such as hunters, anglers and birdwatchers. Upon completion of a property survey at Interlake, a master plan will be completed to guide property development and management.

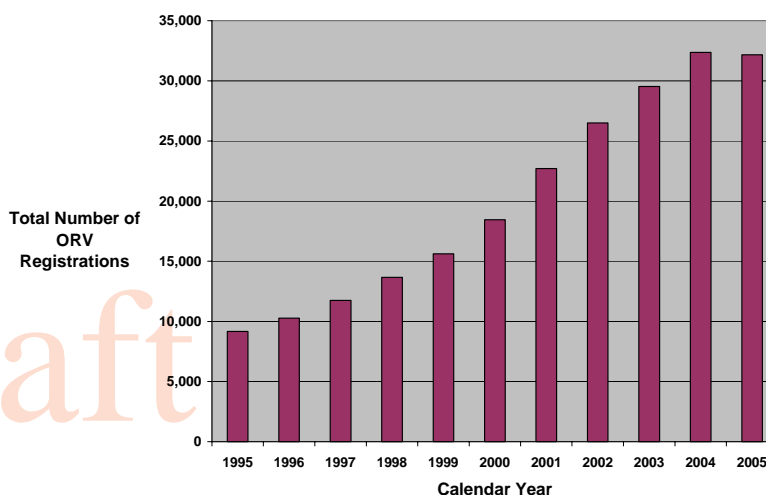
Other Indiana off-road vehicle riding facilities are helping to meet the demand for this type of



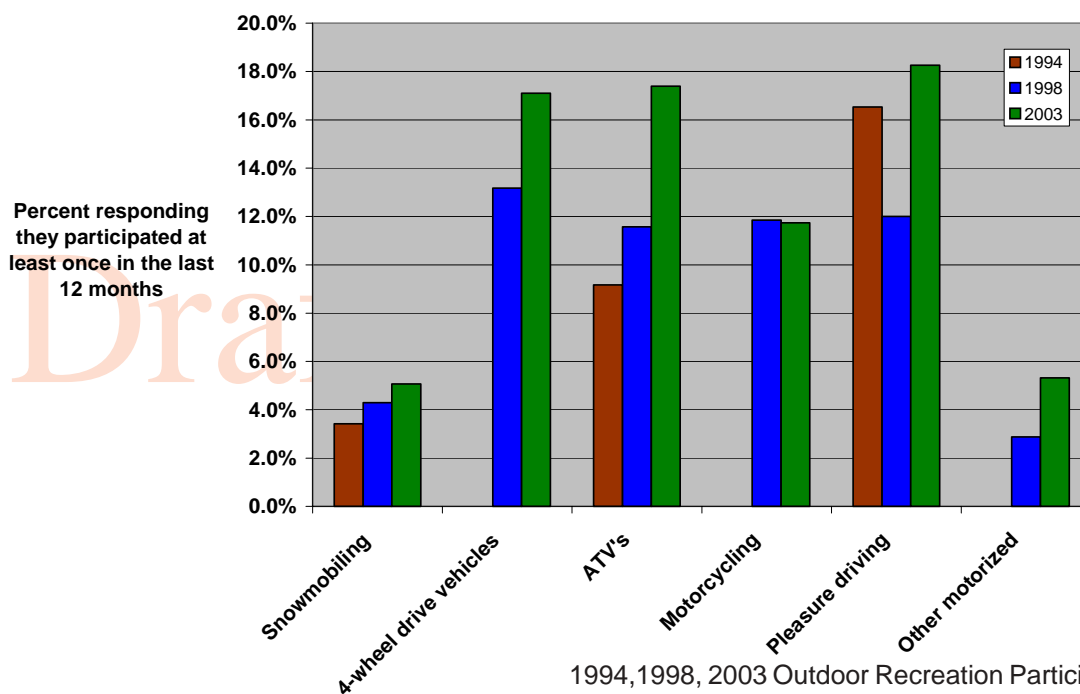
recreation. Private, for profit, facilities include Badlands near Attica, Guion Hill ATV Park near Rockville, and Haspin Acres near Laurel. ABATE of Indiana recently opened the Lawrence County Recreation Park near Springville. Also, Prairie Creek Reservoir and Park near Muncie has an off-road vehicle riding area. All of the existing and planned off-road vehicle riding facilities open to the public are located in the southern two thirds of Indiana.

As with other types of recreation, off-road vehicle riding can be a social activity that is shared by family and friends. There are 27 known off-road vehicle clubs in Indiana. Besides social activities, the clubs serve as way for individuals to gain knowledge and expertise with the sport of off-roading, including educating members about trail stewardship and trail sharing ethics programs such as Tread Lightly. Indiana off-road vehicle clubs also provide opportunities for members to get involved with volunteer trail maintenance events.

Annual Off Road Vehicle Registration



Motorized Use Participation Through Time in Indiana



1994, 1998, 2003 Outdoor Recreation Participation Surveys.

Snowmobile Trails



When the leaves fall off the trees, the hiking boots go back in the closet, the boats have been put into storage and the most bikes have been tucked away, another activity is just getting started. For many Hoosiers recreating in freezing temperatures

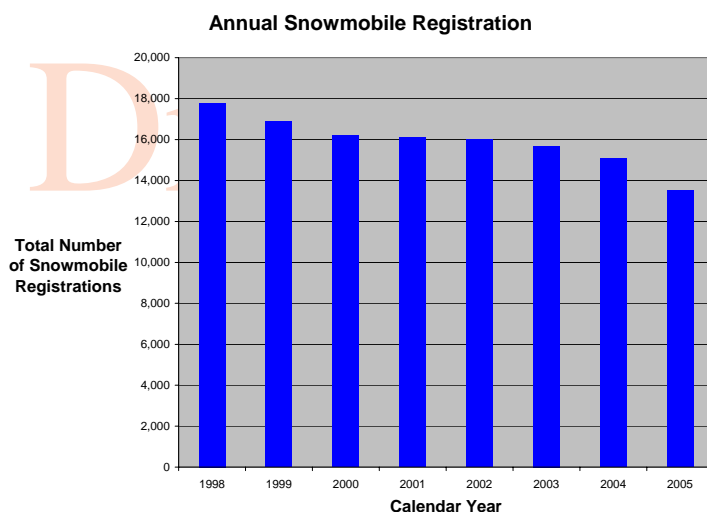
sounds like a good idea. Thousands of people go snowmobiling in the United States every year. Covering more ground in a day than one could in a week on foot with a group of friends is what keeps people excited. The snowmobile's motor and rear track pushes travels along with surprising ease on the slick and powdery surface. The snowmobile will cruise slowly through the trees allowing the rider to soak up the white wonderland and even catch a glimpse of deer foraging.

Like many other recreational activities, snowmobiling is enjoyed as a social sport. People travel in groups to enjoy the cold outdoors. There are at least 13 snowmobile clubs in the northern half of Indiana. Friends and family spend as much time enjoying each others' company as they do sledding. It has to be a social sport, similar to other motor sports, one of the main rules of the Safe Riders! program is to never sled alone. To aid these rules, safety courses are put on by local law enforcement and the Indiana Snowmobiling

Association to help new riders learn what it takes to ride and be safe.

Snowmobiling is not a inexpensive sport; it is one of the most expensive forms of trail recreation. The snowmobile is not the only cost; riders need proper clothing, a trailer, a truck to pull it all with and some gas money. Nationwide, snowmobiling is a big business, for both manufacturing and tourism. According to recent economic impact studies performed by Iowa State University, Plymouth State University in New Hampshire and the University of Minnesota, snowmobiling generates slightly over \$27 billion worth of economic activity in the United States and Canada and is directly responsible for at least 85,000 full time employment jobs. Snowmobilers love their winter sport and the average person spends approximately \$2500.00 per year on snowmobile related activities which include food, lodging and travel. Even Indiana benefits from snowmobile tourism. When a good snow falls, residents of Michigan, Ohio and Illinois travel to the Indiana snowmobile trails.

Indiana has five snowmobile trails located in the northern section of the state. These winter use trails are like no others in the state; they exist for only a few months a year. Agricultural and forested property is leased from December through March when farmers and landowners are not using it for crops. It is a great opportunity for snowmobilers to access otherwise idle land. Once the snow melts in the spring, the trail markers and signs are removed and fields become productive farmground again.



The Department of Natural Resources cooperates with the Indiana Snowmobile Association, local clubs and landowners to provide this motorized winter recreation. The land is privately owned and leased by the local snowmobile trail clubs. Volunteers from those clubs provide all the labor needed to keep the trails operational. This includes meeting with landowners to secure leases, building the trail, maintaining trail building equipment and grooming the trail when needed. Without this volunteer workforce, the program could not financially support itself. DNR employees

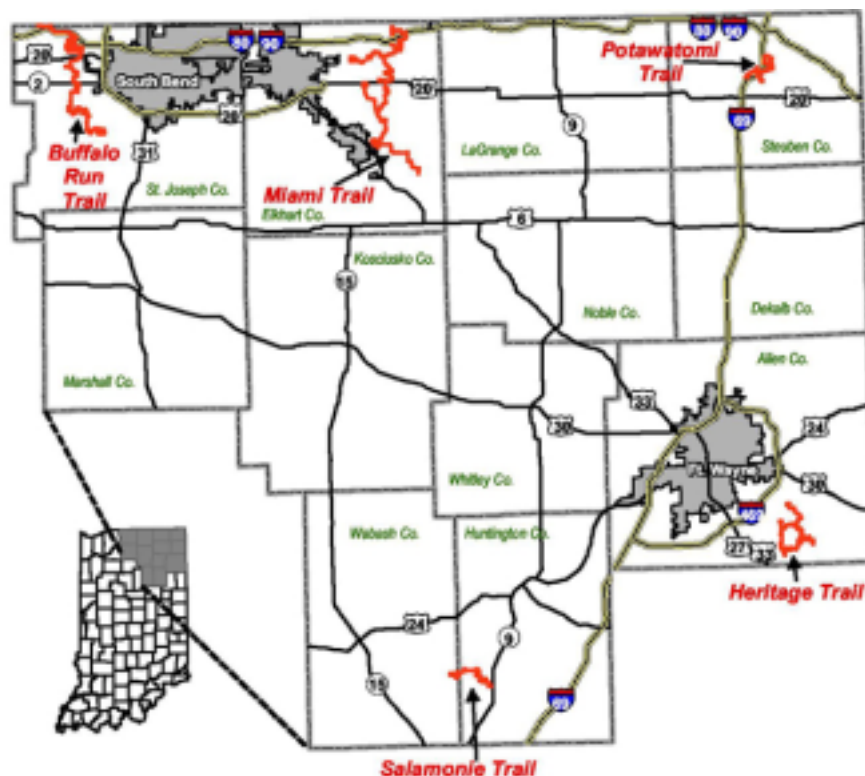


handle most of the paperwork and behind the scenes work to keep the trails open.

The money needed to pay the landowners for the use of their land and to cover the clubs' cost of maintaining the trails comes entirely from snowmobile registrations. Over 12,000 snowmobiles are registered in Indiana at any given time. Registration costs \$30 for 3 years and 100% of that money goes into the program that gives Hoosiers a legal place to ride and enjoy the outdoors when the thermometer drops below freezing. The number of registered snowmobiles has decreased in recent years, possibly due to a decrease in snowfall over the same period, which has contributed to a dwindling balance in the snowmobile program account.

Over 200 miles are available to the hardy souls who love a white landscape.

- The Miami snowmobile trail is 62 miles of trail maintained by the Elkhart County Snowmobile Club around Goshen, Bristol, and Middlebury in northeastern Elkhart County.
- The Potawatomi trail is 14 miles of trails maintained by the Potawatomi Snowmobile Club north of Angola in Steuben County.
- The Heritage trail is 34 miles of trail maintained by the Hoagland Blizzard Blazers Snowmobile Club around Hoagland and Maples in southeastern Allen County.
- The Buffalo Run snowmobile trail is 73 miles of trails maintained by the South Bend Snowmobile Club west of South Bend in St. Joseph County.
- The Salamonie Trail is maintained by the Salamonie Trailmasters Snowmobile Club and consists of about 40 miles of trail on public land along the south side of Salamonie Reservoir in Wabash and Huntington counties. This trail differs from the other trails because it is entirely on State owned property.



Single-use Trails

Single use trails are designed or designated for a single purpose. While the thought is unconventional, roads in Indiana can be described as single use trails because they are specifically designed for motorized vehicular traffic. On a more practical level, the single use trail that most often come to mind are those trails found on Indiana's state parks. Hiking trails are generally single use trails because of their isolation, deference to the natural environment and because the surface is soil or forest litter. Bicycle, horse, mountain bike, snowmobile, off-road vehicle, canoe and hiking are all examples of trail activities that could require a trail to be designated single use trails.

Trails are often designated as single use trails for the sake of safety. Motorized recreation trails are single use because of the size, weight and speed of the vehicles. While motorized trails may be suited for other uses, it is not always safe for trail users. Speed is also a factor in determining how many uses a trail will support. Certain bicycle and running trails may be designated as single use.

The level of expertise required to negotiate the trail requires higher speeds than then casual user would reach. Conversely, restricting speed on a trail may have the unintended consequence of limiting its use to a single trail activity.

The number of users a trail supports is also a factor in determining how many types of trail uses will be allowed. If a trail is used heavily for a particular activity it may be safer to designate the trail solely for that purpose. Accidents are more likely to happen in over crowded situations. The overall user experience may benefit from a single use too. A congested trail can degrade the user's experience if relaxation and nature watching is the goal. Separate trails may also relieve crowding and conflict at trailheads where people access the trails.



Single Use Trail Opportunities in Indiana (May, 2006)


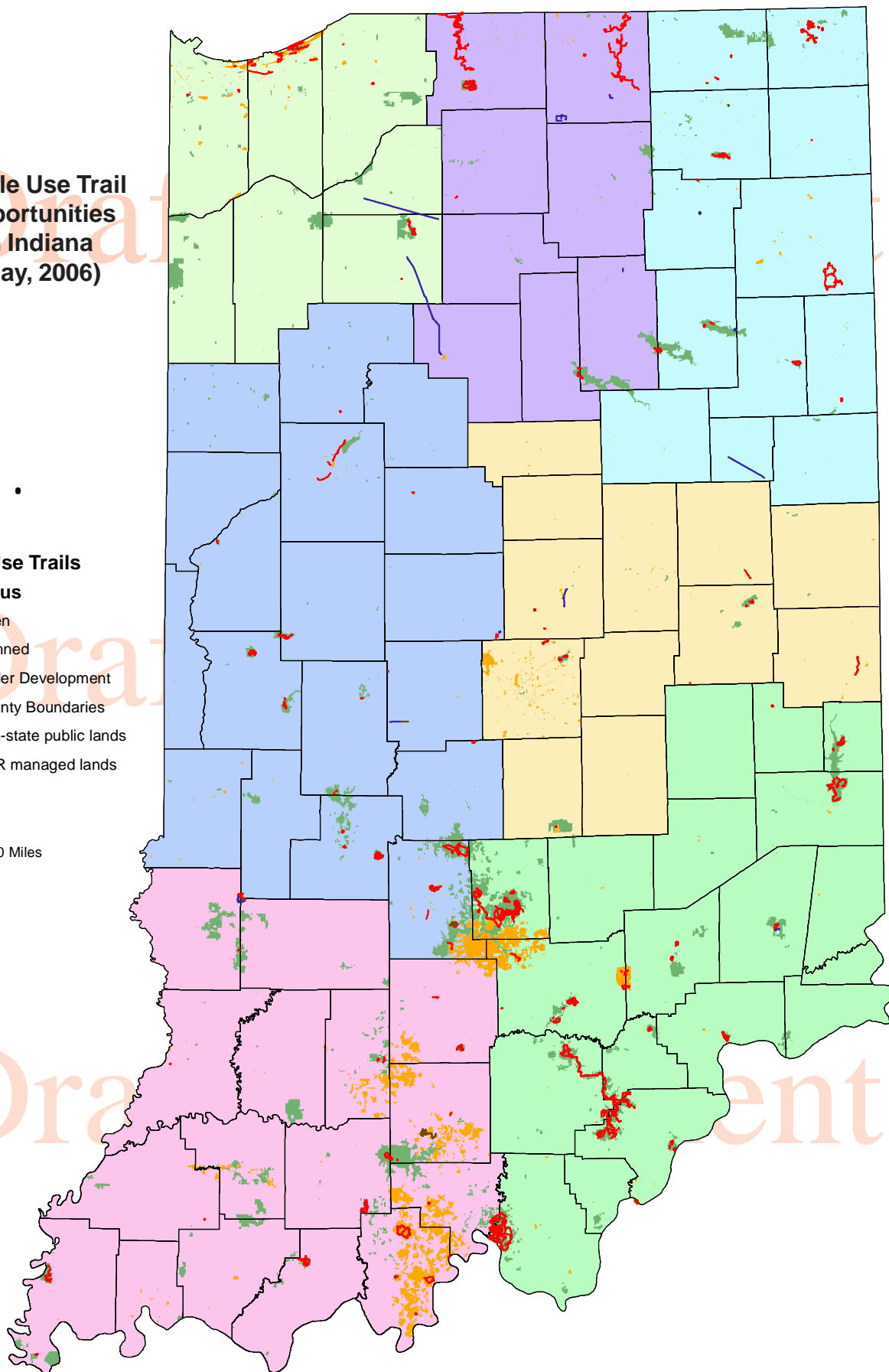
Legend

Single Use Trails

Trail Status

- Open
- Planned
- Under Development
- County Boundaries
- Non-state public lands
- DNR managed lands

0 2.5 5 10 Miles



Indiana's Longest Foot Path

Southern Indiana contains Indiana's premier hiking trail, the Knobstone. The Knobstone Trail (KT) is Indiana's longest footpath - a 58-mile backcountry-hiking trail passing through Clark State Forest, Elk Creek Public Fishing Area and Jackson-Washington State Forest. The first sections of the Knobstone were opened to the public in 1980.

Within the Indiana Department of Natural Resources, the Divisions of Fish and Wildlife, Forestry and Outdoor Recreation developed the Knobstone Trail. The Division of Outdoor Recreation's Streams and Trails Section coordinates development and maintenance of the trail, while Forestry is the owner of most of the land. The Nature Conservancy helped acquire land necessary to complete the trail corridor. Indiana Heritage Trust Funds and federal Land and Water Conservation Fund (LWCF) monies were used as well. Much of the initial trail construction was accomplished through the Young Adult Conservation Corps program. To keep the trail free of fallen trees and in good shape, primary construction and maintenance of the trail is done by DNR employees. Many hours of volunteer work donated by various hiking clubs and other such groups as the Hoosier Hikers Council to fix erosion problems and help with trail work.

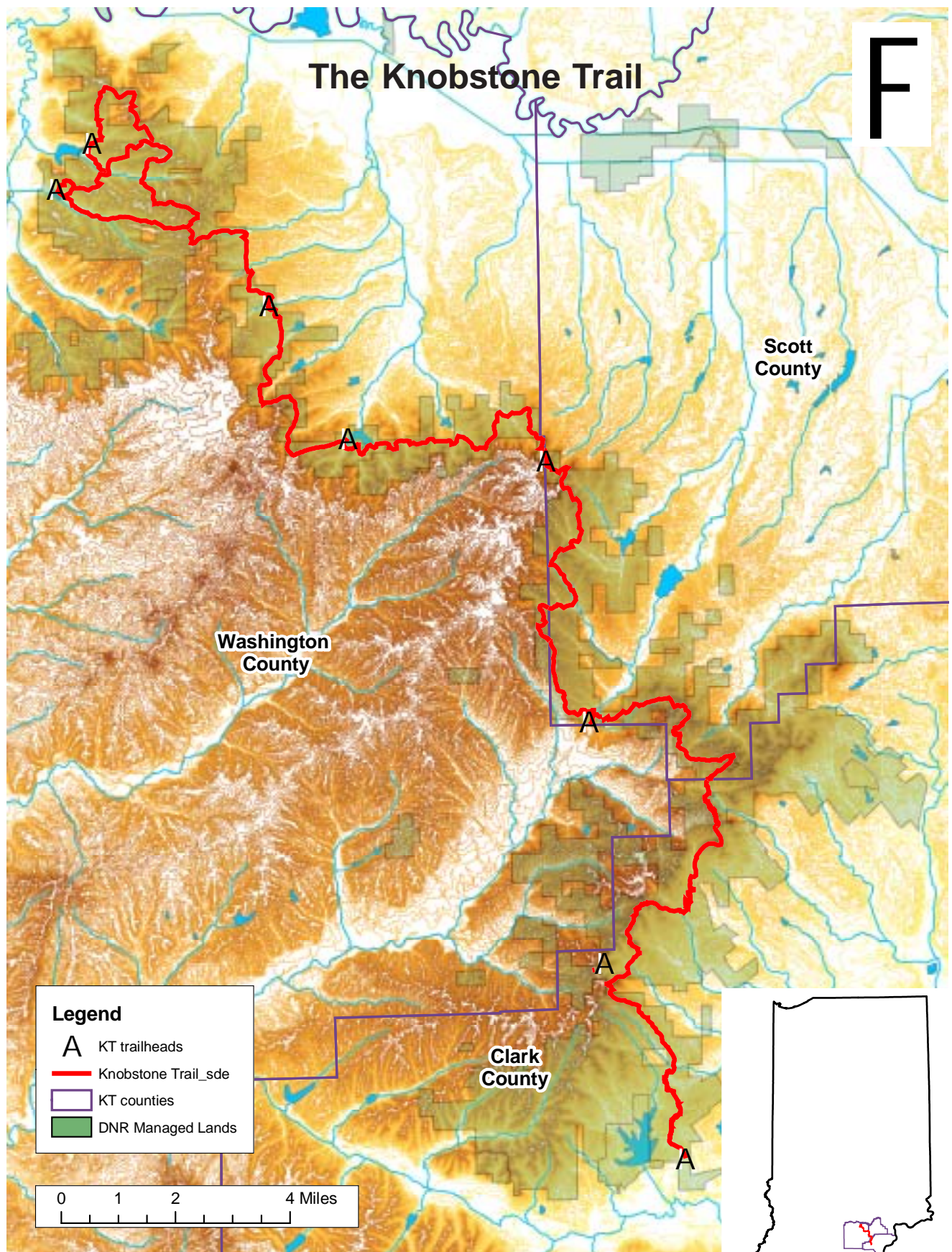


The Knobstone Trail is developed and managed for foot traffic only. Hikers will find themselves on a trail that traverses land with extreme topography distinguished by narrow, relatively flat-topped ridges. These are typical of the Knobstone Escarpment - a knobby slope between the Norman Upland and Scottsburg Lowland, two of southern Indiana's natural land regions. The Knobstone Escarpment is one of Indiana's most scenic areas, rising more than 300 feet above low-lying farmland in some areas as it snakes northward from near the Ohio River to just south of Martinsville.

All season trail use is allowed, but spring and fall are the most popular time to enjoy the unique features of the trail that is often compared to the Appalachian Trail. Hikers find that the KT is a rugged, challenging trail. It is managed and maintained at backcountry standards, and structures are limited to primitive steps on the trail. Because of the backcountry designation, primitive backpack camping is allowed along the trail only on public lands at least one mile away from all roads and trailheads, out of sight from the trail and lakes. This isolated atmosphere is what attracts people to the Knobstone Trail. By carrying out everything brought in, the trail retains its remote "away from it all" feeling.

The trail is off limits to horses, motorized vehicles, mountain bikes or any wheeled vehicle. However, it doesn't mean that the area is not used by others. Much of the KT is located on State Forest land that allows hunting and timber management. Hikers should be very aware during hunting season. Orange vests are recommended. Timber harvests may reroute trails since forest management is the primary use of the land. Hikers are guided by 4-foot brown posts with the letters "KT" in yellow near the top and by 3-inch by 6-inch white paint blazes, located near eye level on trees to the right of the trail.

People of all ages and skill levels will find something to love about the Knobstone Trail. From a simple short walk in from a trailhead to a multiple day backcountry camping get away, the KT is sure to reward everyone with an outdoor experience they won't forget. With 58 miles of winding trail, it is worth many visits to see it all.



National Trails

The American Discovery Trail (ADT) is the nation's first coast-to-coast, non-motorized trail. It is a new breed of national trail encompassing 6,800 miles of adventure, discovery and fun. It stretches from Delaware to California reaching across the United States, linking community to community. It provides the opportunity for the most adventurous to travel from coast to coast, truly discovering the heart of America. More importantly, it provides millions access to a trail system that improves quality of life and protects our natural resources. The ADT connects five national scenic, 10 national historic, and 23 national recreational trails; passes through urban centers like Cincinnati and San Francisco; leads to 14 national parks and 16 national forests; and visits 10,000 sites of historic, cultural, and natural significance. It is truly the backbone of the national trails system.

In Indiana, the American Discovery Trail offers a diverse, interesting, and challenging route for hikers, bikers, and other trail users as they cross Indiana on either the northern or the southern route of the ADT. The Northern Midwest Route of the ADT goes northwest from Richmond across the great Midwestern Corn Belt to the more industrialized region south of Gary. The Southern Midwest Route of the ADT follows along and just north of the Ohio River through the Southern Hills region, the only part of Indiana that the glaciers did not reach.

The American Discovery Trail connects to the following trails and destinations:

- Whitewater Valley Gorge National Recreation Trail
- Cardinal Greenway
- Pigeon Creek Greenway
- Morgan Ridge E/W Trail
- Knobstone Trail
- Two Lakes Trail
- Adventure Trail

Forests

- Clark State Forest
- Harrison-Crawford State Forest
- Hoosier National Forest

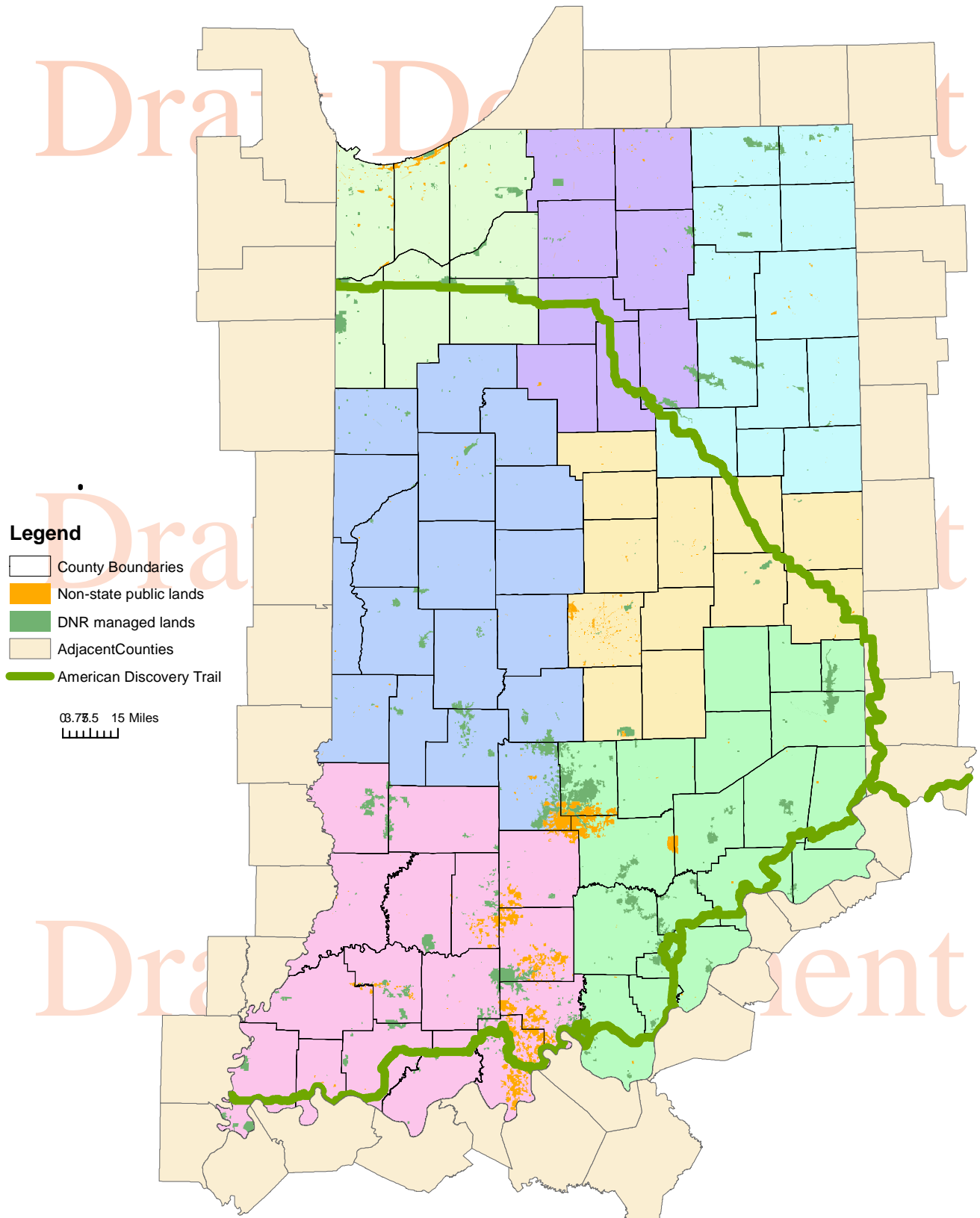
Parks

- Clifty Falls State Park
- Lincoln State Park
- Tippecanoe River State Park
- Falls of the Ohio State Park
- Burdette Park
- Scales Lake County Park

Points of Interest

- Holiday World Amusement Park
- Angel Mounds State Historic Site
- Memorial Parkway
- Frances Slocum State Recreation Area
- Lake Manitou
- Jasper-Pulaski State Fish and Wildlife Area
- LaSalle State Fish and Wildlife Area
- Col. Williams Jones State Historic Site
- Pigeon Roost State Historic Site
- Hill Forest State Historic Site
- Bass Lake State Beach
- Wyandotte Caves
- Hovey Lake State Fish and Wildlife Area

The American Discovery Trail Through Indiana



Nationally Designated Trails

National Recreation Trail designation is an honor given to those existing trails that have been nominated and meet the requirements for connecting people to local resources and improving their quality of life. The national trail designation is part of a continuing campaign to promote community partnerships and to foster innovative ways to encourage physical fitness. The National Trails System Act of 1968 encourages the Secretary of the Interior to recognize existing community trails that qualify as additions to the National Trails System. The Act promotes enjoyment and appreciation of trails and greater public access.

Central Canal Towpath Trail - This 5-mile trail follows a historic canal towpath dating back to 1836. It represents one of the few historic functioning canals and was designated as an American Water Landmark in 1971. In addition to its historical significance, the trail serves as a link to the Monon Rail-Trail and White River Trail and provides recreational opportunities including biking and cross-country skiing

The Monon Rail-Trail - This almost 8-mile rail-trail, one of the State's first rail-trails, connects the Indianapolis community by providing a link between area neighborhoods and popular downtown attractions including the Indianapolis Art Center and Indiana State Fair Grounds. The trail also provides recreation for people who enjoy such activities as inline skating and wildlife observation. In 2000, the trail was named one of the ten best examples of landscape architecture in Indiana by the American Society of Landscape Architects (ASLA).

The Monon Greenway - A five-mile rail-trail and greenway that links Carmel's suburban neighborhoods with area businesses, the civic square and a planned Central Park. The greenway is a key part of a regional trail system and connects with the Monon Rail-Trail (a NRT) in Indianapolis. The trail has brought with it a sense of community and provides a peaceful setting in which residents can explore their surroundings while enjoying a walk or bike ride (*designated 2003*).

Pleasant Run Trail - This almost 7-mile trail connects Southeast Indianapolis neighborhoods to a variety of parks and recreational facilities. The trail runs along a creek and is a significant part of the Indianapolis greenways system. In addition to its natural resources, the trail also provides recreation for people who enjoy such activities as fishing and biking.

White River "Wapahani" Trail - Just under 5-miles, this trail is part of a 20-mile greenway that will stretch throughout the entire Indianapolis metropolitan area. It plays a vital role in connecting area neighborhoods with colleges, regional parks, and downtown locations. In addition to its connectivity, the trail also provides scenic views and recreation for people who enjoy activities like canoeing and rollerblading

Beyer Farm Trail - This trail promotes the educational, recreational, and health benefits of trails. It begins at the county hospital's campus and runs to Pike Lake Park, taking visitors along a boardwalk through a 60-acre urban wetland. This wetland supports a variety of flora and fauna, and the interpretive trail signs help trail users understand the significance of the habitat during





their walk or bike ride. As part of the larger Lake City Greenway project, the trail will serve as a key community connector to the City of Warsaw and the Town of Winona Lake.

Cardinal Greenway - A 30-mile rail-trail that spans 5 counties and 3 major cities. It is the state's longest linear park and serves all of East-Central Indiana. The multi-use greenway is part of a 60-mile project that provides a key community connection to area schools, parks, and local cultural and historic resources. Trail users enjoy a number of activities including jogging, biking and wildlife viewing. This greenway is a fine example of what is possible through volunteers and successful partnerships.

The Cattail Trail - This four-mile urban trail and greenway (currently under construction) provides West Lafayette residents with a connection to the Northwest Greenway Trail, Celery Bog Nature Area, and Purdue University's Pickett Park. In addition to its natural features, the trail allows for recreational opportunities including biking, skiing, and skateboarding.

Delphi Historic Trails - Running more than 7 miles throughout the city, this multi-use trail system provides a unique setting for hiking, biking, and canoeing. Trails have been integrated into this historic community using canal towpaths, stream

corridors, and abandoned railroads. The trails also include a section of the Wabash Heritage Trail, which is envisioned to follow along the Wabash River and span 19 counties. This trail system is a fine example of what is possible through volunteers and a diverse partnership.

Pigeon Creek Greenway Passage - Located in Vanderburgh County, this 3-mile trail and greenway is part of a planned 42-mile greenway trail system that will encircle the county and serve the entire city of Evansville. Bicyclists, hikers, and kayakers are just some of the groups who enjoy what this trail has to offer in an urban setting. The project has inspired thoughts of a multi-county regional trail plan in the future.

The Northwest Greenway - Features a five-mile trail (currently under construction) that connects with a local trail system and on-road bicycle lanes, providing West Lafayette residents with a variety of recreational opportunities as well as a means of alternative transportation to locations throughout the city, including Purdue University. In addition to its natural features, the trail provides recreational opportunities including biking, skiing, and wildlife observation.